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NEW HAMPSHIRE
AGRICULTURAL EXPERIMENT STATION
DEPARTMENT OF CHEMISTRY

Results of the Fertilizer Inspection

For 1910

MADE FOR THE
STATE BOARD OF AGRICULTURE

BY B. E. CURRY AND T. O. SMITH

NEW HAMPSHIRE COLLEGE
OF
AGRICULTURE AND MECHANIC ARTS
DURHAM, N. H.

NEW HAMPSHIRE COLLEGE

OF

AGRICULTURE AND THE MECHANIC ARTS.

NEW HAMPSHIRE AGRICULTURAL EXPERIMENT STATION

DURHAM, N. H.

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The bulletins of the Experiment Station are published at irregular intervals, and are sent *free* to all residents of New Hampshire requesting them.

THE INSPECTION OF FERTILIZERS FOR 1910

The samples of fertilizer for the 1910 inspection were collected under the direction of the State Board of Agriculture and turned over to the Experiment Station for analysis. Samples from one hundred and thirty-eight brands of chemicals and mixed fertilizers have been reported. The same number of brands were offered for sale in 1910.

Numerous inquiries are received at the Experiment Station concerning the merits of individual brands of fertilizers, as well as comparative values of different brands. An investigation of the prices at which the various brands of fertilizers are retailed shows that the careful buyer has a great advantage over the less careful. Three brands of fertilizer having practically the same guaranteed analyses were offered for sale at the rate of $1.40, $1.50 and $1.70 per hundred pounds, or $28, $30 and $34 per ton respectively. The lower price no doubt represented a fair profit to the manufacturer and dealer. Fifty cents would cover the difference in the calculated values for a ton of these fertilizers.

As a basis for making a comparative study of different brands of fertilizers, the following facts are useful:

In 1910 the following retail prices were made:

Nitrate Soda,	15% Nitrogen,	$2.50 per hundred pounds.
Muriate of Potash,	50% Potash,	2.10 " " "
Acid Phosphate,	14% Available,	.80 " " "

At this rate the nitrogen, potash and phosphoric acid could be had for 16.6 cents, 4.2 cents and 5.7 cents per pound respectively. It must be remembered that these figures represent the cost in the unmixed chemicals.

When these prices or figures are applied to the ready-mixed fertilizers it will be found that the value will represent about 60% of the usual selling price. In other words, the cost of the potash, phosphoric acid and nitrogen has been increased about 40% by the mixing process.

Of the brands of fertilizers collected in 1910, the retail selling price of 94 brands of complete mixed fertilizers were obtained. The price and average guaranteed percentage of nitrogen, available phosphoric acid and potash were calculated with the following results: Nitrogen, 2.36%, available phosphoric acid, 6.83%, potash, 5.07%; average selling price, $1.60 per hundred pounds.

The consumer might have obtained the same amount of nitrogen, phosphoric acid and potash in the unmixed condition for 93 cents.

Stated otherwise, the average consumer who buys unmixed goods gets as much in the unmixed condition for 93 cents as the consumer of ready-mixed goods gets for $1.60.

These figures represent averages. There are instances where fertilizers are offered for sale at more than double the retail cost of the chemicals in the unmixed condition. Some of the high-grade mixtures were offered for sale at almost double the retail cost of the chemicals they contained. These, in some instances, are mechanical mixtures of nitrate of soda, acid phosphate and muriate or sulfate of potash.

Heretofore it has been pointed out in these reports that the economical consumer would buy the high-grade mixtures; unless much care is exercised at the present time the consumer will pay more for the high-grade mixtures than they are worth when compared with other mixtures. In other words, it is for the consumer to scrutinize the guarantee tags carefully in connection with the price.

The brands of fertilizers inspected for 1910 show no

great variations from the guaranteed analysis. It is evident that the manufacturers intend to have the guaranteed analysis represent the quality of the goods offered for sale.

Analytical assistance has been rendered by Messrs. J. E. Robinson and C. H. Robinson in the preparation of this report.

Composition of Commercial Fertilizers Sampled and Analyzed in 1910.

Manufacturer and Brand.	Nitrogen.				Phosphoric Acid.							Potash.	
			Total.				Available.			Total.			
	Inorganic.	Organic.	Found.	Guaranteed.	Soluble.	Reverted.	Found.	Guaranteed.	Insoluble.	Found.	Guaranteed.	Found.	Guaranteed.
American Agricultural Chemical Co.													
American Potato Manure	1.49	.60	2.09	2.06	7.67	.23	7.90	8.00	2.10	10.00	9.00	3.21	3.00
Bradley's Complete Manure for Corn and Grain	2.99	.29	3.28	3.29	10.57	1.68	12.25	12.00	1.25	13.50	13.00	3.00	3.00
Bradley's Complete Manure for Potatoes and Vegetables	2.22	1.01	3.23	3.20	6.66	1.51	8.17	8.00	1.50	9.67	9.00	7.12	7.00
Bradley's Complete Manure Top Dressing Grass and Grain	4.25	.00	4.25	4.94	4.19	2.61	6.80	5.00	1.02	7.82	6.00	3.69	2.50
Bradley's Complete Manure with 10% Potash	2.12	1.16	3.28	3.29	6.56	1.67	8.23	6.00	2.00	10.23	7.00	7.30	10.00
Bradley's Corn Phosphate	.67	1.43	2.10	1.65	6.80	1.00	7.80	8.00	2.65	10.45	9.00	1.87	1.50
Bradley's Eclipse Phosphate	.46	.57	1.03	1.03	6.80	1.92	8.72	8.00	1.90	10.62	10.00	2.28	2.00
Bradley's Grass and Lawn Top Dressing	3.58	.00	3.53	3.91	3.30	2.72	5.72	5.00	1.25	6.97	6.00	2.44	2.00
Bradley's Potato Fertilizer	1.33	.86	2.19	2.06	6.30	1.31	7.61	8.00	1.70	9.31	9.00	3.05	3.00
Bradley's Potato Manure	1.67	1.07	2.74	2.47	6.22	1.43	7.65	6.00	1.90	9.55	7.00	6.14	5.00
Bradley's X L Super-Phosphate	1.63	.96	2.59	2.47	8.40	1.30	9.70	9.00	2.55	12.25	10.00	2.35	2.00
Clark's Cove Bay State G. G	1.06	1.05	2.11	2.06	6.80	1.45	8.25	8.00	2.55	10.80	9.00	1.70	1.50
Clark's Cove Potato Fertilizer	1.14	.81	1.95	2.05	7.05	1.52	8.57	8.00	2.25	10.82	9.00	3.31	3.00
Cleveland Fertilizer for all crops	.48	.69	1.17	1.60	6.30	2.08	8.38	8.00	2.47	10.85	9.00	2.09	2.00
Cleveland Potato Phosphate	1.49	.48	1.97	2.06	7.50	1.48	8.98	8.00	2.47	11.45	9.00	3.38	3.00
Cleveland Super-Phosphate	.79	1.58	2.37	2.06	6.80	1.92	8.72	8.00	2.60	11.32	9.00	1.63	1.50
Crocker's Ammoniated Corn Phosphate	.74	1.53	2.27	2.06	6.00	2.27	8.27	8.00	2.65	10.92	9.00	1.85	1.50
Crocker's New Rival Ammoniated Bone Super-Phosphate	.70	.61	1.31	1.03	6.20	2.73	8.93	8.00	1.87	10.80	9.00	2.10	2.00
Crocker's Potato, Hop and Tobacco Phosphate	1.07	.99	2.06	2.06	6.40	2.82	9.22	8.00	2.50	11.72	9.00	3.27	3.00
Crocker's Special Potato Manure	1.88	1.11	2.99	3.29	5.30	.72	6.02	6.00	1.30	7.32	7.00	10.12	10.00
Cumberland Potato Fertilizer	1.13	1.00	2.13	2.06	6.50	2.55	9.05	8.00	1.70	10.75	9.00	2.98	3.00
Cumberland Super-Phosphate	1.86	1.35	2.21	2.06	6.40	1.95	8.35	8.00	2.25	10.60	9.00	1.58	1.50
Darling's Blood, Bone and Potash	1.73	3.18	4.91	4.11	5.90	.15	6.05	7.00	2.75	8.80	8.00	6.77	7.00
Darling's Farm Favorite	1.61	.53	2.14	2.06	7.30	1.14	8.54	8.00	2.35	10.89	9.00	3.36	3.00
Darling's General Fertilizer	.71	.85	1.56	1.23	5.82	2.47	8.29	6.00	1.65	9.91	7.00	4.68	3.00
Darling's Potato Manure	1.62	1.28	2.90	2.47	6.10	1.99	8.09	6.00	1.02	9.11	7.00	7.12	5.00
Formula B. Seeding Down	1.93	1.24	3.17	.....	1.30	4.30	5.60	.....	7.17	12.77	.....	13.80	.....
Grass and Oats Fertilizer	.....	.....	.....	.....	8.80	3.17	11.97	11.00	2.90	14.87	12.00	2.00	2.00
Great Eastern Garden Special	2.26	.77	3.08	3.29	6.80	1.37	8.17	8.00	1.75	9.92	9.00	6.45	7.00
Great Eastern General Fertilizer	.76	.30	1.06	.62	6.50	2.00	8.50	8.00	2.97	11.47	10.00	3.66	4.00
Great Eastern Northern Corn Special	1.45	1.01	2.46	2.06	7.55	1.61	9.19	8.00	1.75	10.94	9.00	1.87	1.50

Great Eastern Potato Manure	1.47	.61	2.08	2.06	7.45	1.98	9.43	8.00	1.97	11.40	9.00	3.22	3.00
Ground Bone	.33	2.69	3.02	.....	.....	.....	.....	.....	.....	22.95	22.88	.....	.....
High Grado Sulphate of Potash	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.22	48.00
High Grade with 10% Potash	1.30	1.10	2.40	2.47	5.30	.70	6.00	6.00	1.23	7.23	7.00	9.43	10.00
Muriate of Potash	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51.80	50.00
Nitrate of Soda	15.11	.....	.....	15.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pacific Potato Special	1.35	.63	1.98	2.06	7.62	2.39	10.01	8.00	2.35	12.36	9.00	3.35	3.00
Packer's Union Animal Corn Fertilizer	1.55	.94	2.49	2.47	7.90	1.92	9.82	9.00	2.40	12.02	10.00	2.36	2.00
Packer's Union Gardner's Complete Manure	1.08	1.29	2.37	2.47	5.50	1.88	7.38	6.00	2.15	9.52	7.00	9.22	10.00
Packer's Union Potato Manure	.91	1.18	2.09	2.05	7.25	2.05	9.30	8.00	1.87	11.17	9.00	6.04	6.00
Packer's Union Universal	.52	.60	1.12	.32	7.20	1.30	8.50	8.00	1.87	10.37	9.00	3.81	4.00
Plain Super-Phosphate	.....	.....	.....	.....	9.82	6.38	16.20	14.00	1.45	17.65	15.00	.....	.....
Quinipiac Corn Manure	.72	1.67	2.39	2.06	8.05	1.45	9.50	8.00	1.82	11.32	9.00	1.75	1.50
Quinipiac Potato Phosphate	1.56	1.82	2.38	2.06	5.10	1.69	7.09	8.00	3.15	10.24	9.00	3.35	3.00
Read's Farmer's Friend Super-Phosphate	1.15	.88	2.03	2.06	8.15	1.59	9.74	8.00	1.60	11.34	9.00	3.40	3.00
Read's Potato Manure	1.28	1.07	2.35	2.47	5.50	2.17	7.67	6.00	1.65	9.32	7.00	10.00	10.00
Read's Practical Potato Special Fertilizer	.65	.88	1.53	.82	6.32	1.67	7.99	4.00	1.75	9.74	5.00	8.72	8.00
Read's Standard Super-Phosphate	.50	.46	.96	.82	6.70	2.07	8.77	8.00	2.35	11.12	9.00	4.20	4.00
Read's Vegetable and Vine Fertilizer	1.20	.92	2.12	2.06	7.10	.90	8.00	8.00	2.60	10.60	9.00	6.19	6.00
Soluble Pacific Guano	2.14	.....	2.12	2.06	6.80	2.05	8.85	8.00	1.90	10.75	9.00	1.65	1.50
Special Vegetable Guano	2.16	1.16	3.32	3.29	6.40	1.94	8.34	8.00	2.15	10.19	9.00	7.29	7.00
Williams & Clark American Corn Phosphate	1.02	1.23	2.25	2.06	6.35	1.92	8.27	8.00	1.70	9.97	9.00	1.79	1.50
BOWKER FERTILIZER CO.													
Bowker's Corn Phosphate	.99	.90	1.89	1.65	6.75	2.49	9.24	8.00	1.42	11.66	9.00	2.01	2.00
Bowker's Farm and Garden Phosphate	1.30	.73	2.03	1.65	7.10	1.82	8.92	8.00	1.55	10.47	9.00	2.33	2.00
Bowker's Highly Nitrogenized	8.26	.....	8.30	8.23	1.10	4.45	5.55	7.00	3.30	8.85	8.00	.90	8.00
Bowker's Hill & Drill Phosphate	1.34	1.04	2.38	2.47	6.80	1.60	8.40	9.00	2.40	10.80	10.00	2.03	2.00
Bowker's Potato and Vegetable Phosphate	.92	.80	1.72	1.55	7.20	1.40	8.60	8.00	2.40	11.00	9.00	2.19	2.00
Bowker's Sure Crop Bone Phosphate	.86	.52	1.38	.82	6.50	1.90	8.40	8.00	2.15	10.55	9.00	2.17	2.00
Stockbridge Complete Manure	2.48	.64	3.12	3.29	3.35	2.92	6.27	6.00	1.50	7.77	7.00	10.24	10.00
Stockbridge for Corn and all Grain Crops	2.16	.74	3.00	3.29	7.62	3.38	11.00	10.00	1.44	11.44	11.00	7.02	7.00
Stockbridge Manure Top-dressing and Foreing	3.16	1.64	4.80	4.94	3.50	1.04	4.54	4.00	1.95	6.49	6.00	6.02	6.00
Stockbridge Special Complete Manure Seeding	1.17	1.17	2.34	2.47	3.30	2.66	5.96	6.00	2.65	8.61	9.00	10.03	10.00
Stockbridge Special Complete Potatoes and Vegetables	2.61	.58	3.19	3.29	4.70	1.45	6.15	6.00	1.35	7.50	7.00	10.04	10.00
Bowker's Super-Phosphate with Potash	.....	.....	.....	.....	9.10	2.02	11.12	10.00	2.30	13.42	11.00	2.23	2.00
BUFFALO FERTILIZER CO.													
Celery and Potato Special	.69	1.06	1.75	1.64	4.10	3.90	8.00	8.00	1.90	9.90	9.00	10.15	10.00
High Grade Manure	2.42	1.77	4.19	3.30	5.60	2.40	8.00	7.00	1.25	9.25	.....	6.86	10.00
New England Special	.....	.....	1.81	1.64	4.90	2.10	7.00	9.00	2.60	9.60	.....	5.92	10.00

Composition of Commercial Fertilizers Sampled and Analyzed in 1910.—Continued.

Manufacturer and Brand.	Nitrogen.				Phosphoric Acid.							Potash.	
			Total.				Available.			Total.			
	Inorganic.	Organic.	Found.	Guaranteed.	Soluble.	Reverted.	Found.	Guaranteed.	Insoluble.	Found.	Guaranteed.	Found.	Guaranteed.
Coe-Mortimer Fertilizer Co.													
Basic Slag Phosphate	.....	.....	.....	.....	.....	4.78	4.78	15.00	12.25	17.03	17.00	.....	.....
E. Frank Coe's Celebrated Special Potato Fertilizer	.68	.78	1.46	1.55	4.05	2.95	7.00	8.00	2.65	9.65	9.00	1.31	4.00
E. Frank Coe's Columbian Corn and Potato Fertilizer	.19	1.13	1.32	1.23	6.05	3.42	9.47	8.50	1.75	11.22	9.50	2.73	2.50
E. Frank Coe's Complete Manure with 10% Potash	1.27	.95	2.22	2.47	.50	4.35	4.85	6.00	2.95	7.80	6.00	9.72	10.00
E. Frank Coe's Gold Brand Excelsior Guano	1.95	.52	2.47	2.47	5.82	2.83	8.65	8.00	1.30	9.95	9.00	7.52	6.00
Excelsior Potato Fertilizer	1.45	.90	2.35	2.47	2.20	4.40	6.60	7.00	1.90	8.50	7.00	7.18	5.00
High Grade Ammoniated Bone Super-Phosphate	2.03	.61	2.64	1.85	2.20	5.45	7.65	8.00	1.35	9.01	9.00	4.46	3.00
New England Corn and Potato Fertilizer	.16	.81	.97	.80	5.60	.95	6.55	7.50	4.20	10.75	8.00	2.40	3.00
Nitrate of Soda	15.08	.....	.....	15.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
E. Frank Coe's XXV Ammoniated Bone Phosphate	.09	.82	.91	.80	5.95	4.03	9.98	8.50	1.32	11.30	9.50	1.71	1.50
Essex Fertilizer Co.													
Essex Complete Manure Corn, Grain and Grass	.81	2.76	3.57	3.28	4.90	1.21	6.10	6.00	1.00	7.10	7.00	9.30	10.00
Essex Market Garden Potato Manure	.52	1.67	2.19	2.00	5.55	3.11	8.66	8.00	1.25	9.91	9.00	5.00	5.00
Essex Complete Manure Potatoes, Roots and Vegetables	.80	2.37	3.17	3.28	1.90	1.40	6.30	.....	1.50	7.80	7.00	9.75	10.00
Essex Peerless Potato Manure	.78	2.33	3.11	4.10	5.45	2.60	7.05	7.00	1.20	8.25	8.00	9.80	8.00
Essex XXX Fish and Potash	.13	1.51	1.81	2.00	5.40	2.62	8.02	8.00	2.00	10.02	9.00	3.07	3.00
Lister's Agricultural Chemical Co.													
Lister's Grain and Grass	.....	.....	.20	.....	9.20	1.99	11.19	10.00	2.37	13.56	11.00	2.04	2.60
Lister's High Grade Special for Spring Crops	1.11	1.02	2.13	1.65	6.10	1.95	8.35	8.00	1.55	9.90	9.00	10.00	10.00
Lister's Special Corn	1.12	.60	1.72	1.23	6.30	2.08	8.38	8.00	2.07	10.45	9.00	3.31	3.00
Lister's Potato Manure	2.31	.78	3.12	3.29	6.70	.66	7.36	8.00	1.70	9.06	9.00	7.01	7.00
Lister's Special Potato Fertilizer	1.05	.53	1.58	1.65	7.70	1.17	8.87	8.00	1.85	10.72	9.00	3.43	3.00

Lister's Success	1.04	.68	1.72	1.23	6.25	3.67	9.92	9.00	1.73	11.65	10.00	1.81	2.00
Lister's 10% Potato Grower	1.92	.34	3.26	3.29	4.90	1.85	6.75	6.00	1.95	8.70	7.00	9.73	10.00
New England Fertilizer Co.													
New England Corn and Grain Fertilizer	.13	1.55	1.68	1.23	4.55	2.78	7.33	7.00	1.87	9.20	8.00	1.72	2.00
New England Corn Phosphate	.47	1.15	1.62	1.64	6.40	2.10	8.20	8.00	2.00	10.20	9.00	2.89	3.00
New England High Grade Potato Fertilizer	.22	2.58	2.80	2.46	5.40	2.99	8.39	8.00	2.12	10.51	9.00	5.42	6.00
Nitrate of Soda	15.44	.....	.....	15.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
New England Peerless Fertilizer	.05	1.08	1.13	.82	4.80	3.26	8.06	7.00	1.28	9.34	8.00	1.25	1.00
New England Potato Fertilizer	.51	1.20	1.71	1.64	5.13	2.87	8.00	7.00	1.26	8.26	8.00	3.78	4.00
New England Potato Grower	.25	2.02	2.27	2.46	4.80	1.30	6.10	6.00	2.12	8.22	7.00	10.05	10.00
Nitrate Agency Co.													
Nitrate of Soda	15.16	.....	.....	15.00	.....	.....	.....	.....	.....	.....	.....	50.10	.....
Muriate of Potash	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48.85	48.00
Sulphate of Potash	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Parmenter & Polsey.													
Dissolved Bone Black	.....	.....	.....	.....	13.30	2.68	15.98	15.00	.77	16.75	.....	.....	.....
Dried Blood	.....	.....	5.89	9.54	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ground Tankage	.....	.....	6.14	5.00	.20	5.50	5.70	14.00	8.90	14.60	.....	.....	.....
Muriate of Potash	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	52.85	50.00
Nitrate of Soda	15.57	.....	.....	15.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Parmenter and Polsey Grain Grower	.05	1.45	1.50	1.23	5.10	3.00	7.20	7.00	1.80	9.00	8.00	2.22	2.00
Parmenter and Polsey Potato Grower	.17	2.29	2.46	2.46	3.90	2.10	6.00	6.00	1.75	7.75	7.00	9.75	10.00
Parmenter and Polsey Potato Fertilizer	.14	1.73	1.87	1.64	4.00	1.45	5.45	.....	1.95	7.40	7.00	5.53	6.00
Plymouth Rock Brand	.57	1.66	2.33	2.46	6.77	1.13	7.90	8.00	1.57	9.47	9.00	4.20	4.00
Star Brand Super-Phosphate	.46	1.26	1.72	1.54	4.70	1.86	6.56	7.00	1.15	7.71	8.00	3.76	4.00
Sulphate of Ammonia	20.33	.....	.....	20.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sulphate of Potash	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.20	48.00
Rogers & Hubbard Co.													
Hubbard's Complete Phosphate	.35	1.08	1.43	1.50	4.60	2.79	7.39	7.00	2.80	10.19	8.00	5.87	5.00
Grass and Grain Fertilizer	.21	2.01	2.22	2.20	.....	.....	9.50	6.50	11.16	21.10	16.00	11.09	12.00
Oats and Top Dressing	6.77	1.45	8.22	8.50	.....	4.52	4.52	4.50	6.35	10.87	8.00	8.00	8.00
Hubbard's New Market Garden Phosphate	1.11	.85	1.96	2.00	4.00	3.04	7.04	6.00	2.06	9.10	8.50	10.84	10.00
Hubbard's Raw Knuckle Bone Flour	.10	3.67	3.77	3.50	.....	4.45	4.45	.....	20.30	24.75	24.50	.....	.....
Hubbard's Soluble Potato Manure	1.53	2.49	4.02	5.00	2.11	4.95	7.05	7.00	6.30	13.35	10.00	5.85	5.00
Hubbard's Soluble Tobacco Manure	1.84	2.74	4.58	5.00	1.20	4.59	5.79	7.00	7.65	13.44	10.00	8.87	10.00

Composition of Commercial Fertilizers Sampled and Analyzed in 1910.—Continued.

Manufacturer and Brand.	Nitrogen.				Phosphoric Acid							Potash.	
			Total.				Available.			Total.			
	Inorganic.	Organic.	Found.	Guaranteed.	Soluble.	Reverted.	Found.	Guaranteed	Insoluble.	Found.	Guaranteed.	Found.	Guaranteed.
Potato Phosphate	.98	1.14	2.12	2.00	5.80	4.55	10.35	9.00	3.17	13.52	10.00	5.54	5.00
Soluble Corn and General Crops	1.09	1.41	2.50	2.50	3.30	4.14	7.44	6.00	2.52	9.96	8.00	8.98	8.00
J. W. Sanborn.													
Sanborn's Chemical Fertilizer for Potatoes and Corn	2.04	1.23	3.27	3.50	5.60	1.86	7.46	7.00	1.75	9.21	10.00	7.11	8.00
Sanborn's Chemical Fertilizer for Use in the Hill	1.39	1.16	2.55	2.50	5.00	1.37	6.37	7.30	4.50	10.87	12.00	1.17	4.00
Sanborn's Chemical Fertilizer for Grass and Grain	5.14	....	5.14	5.15	4.00	.92	4.92	4.00	3.00	7.92	7.00	5.30	6.00
Swift's Lowell Fertilizer Co.													
New England Dissolved Bone and Potash	.14	2.05	2.19	1.61	6.20	2.64	8.84	9.00	2.78	11.62	10.00	2.24	2.00
Swift's Lowell Animal Brand	.11	2.41	2.52	2.45	5.75	2.60	8.35	8.00	2.05	10.40	10.00	4.09	4.00
Swift's Lowell Bone Fertilizer for Corn and Grain	.46	1.03	1.49	1.64	5.90	2.28	8.18	8.00	1.70	9.88	9.00	3.27	3.00
Swift's Lowell Cereal Brand	.03	.96	.99	.88	4.75	2.25	7.00	7.00	1.37	8.37	8.00	1.15	1.00
Swift's Lowell Empress Brand	.12	1.17	1.29	1.29	2.50	3.62	6.12	7.00	2.50	8.62	8.00	2.09	2.00
Swift's Lowell Ground Bone	.00	2.52	2.52	2.47	.....	.....	9.60	.....	11.00	20.60	23.00	.....	.....
Swift's Lowell Lawn Dressing	3.74	.21	3.95	4.00	6.20	.80	7.00	7.00	1.50	8.50	8.00	5.57	6.00
Swift's Lowell Potato Fertilizer	.51	1.87	2.41	2.46	6.47	1.45	7.92	8.00	1.45	9.37	9.00	5.76	6.00
Swift's Lowell Potato Manure	.39	1.29	1.68	1.64	5.05	1.74	6.79	7.00	1.33	8.12	.....	4.00	4.00
Swift's Lowell Potato Grower	.60	2.52	3.12	3.28	4.40	2.82	7.22	6.00	1.60	8.82	7.00	10.22	10.00
Swift's Perfect Tobacco Grower	.76	2.85	3.61	4.00	2.50	1.20	3.70	4.00	1.80	5.50	5.00	6.38	6.00
Sterling Phosphate	.05	1.02	1.07	.82	5.80	3.42	9.02	8.00	1.90	10.92	8.00	3.82	4.00
Swift's Special Potato Fertilizer	.11	2.04	2.15	2.45	3.50	2.56	6.06	6.00	2.65	8.71	.....	10.37	.....
Whitman & Pratt.													
Pure Ground Bone	.51	2.09	2.60	2.47	.....	.....	13.25	.....	13.85	27.10	.....	.....	.....

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